

Office Action Summary

Application No.

10/014,153

Applicant(s)

VIERO, TIMO

Examiner

PHUONGCHAU BA NGUYEN

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3-20-9 & Interview 2-6-9.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-40,42-48,51,53,55-57,59-62,64-66 and 74-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35,43-47 and 76-80 is/are allowed.
- 6) ☒ Claim(s) 36-40,42,48,51,53,55-57,59-62,64-66,74 and 75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 2-6-9
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections – 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 36–40, 48, 51, 53, 55–57, 64, 59–62, 65–66, 74–75 are rejected under 35 U.S.C. 102(e) as being anticipated by Popovic (6,567,482).

1–34. (Cancelled)

Regarding claim 36,

Popovic (6,567,482) discloses a method, comprising:

(MS) receiving a parameter (information, col.13, lines 54-59) defining allowed (available) access slots of a physically existing random access channel (RACH) from a base transceiver station (BS) of a mobile communications network by at least one mobile station of a plurality of mobile stations of the mobile communications network (MS acquired information of available access slots on RACH broadcasted from BS, step 220-fig.9);

(MS) determining (determining from acquiring RACH), at said at least one mobile station, said allowed (available) access slots of the physically existing random access channel (RACH) based on said parameter (acquired information), (see step 220-fig.9);

(MS) using (selecting), at said at least one mobile station, at least one (an access slot, step 230-fig.9) of said determined allowed access slots of the physically existing random access channel (RACH) to initiate (send) a random access operation (a request to random access to the selected access slot) with said base transceiver station (BS), (see steps 230-240, fig.9); and

(MS) receiving said parameter (information of available random access channel access slot, col.13, lines 54-59) via a broadcast Channel (via broadcast channel, col.13, lines 43-45 & 53-59), wherein said broadcast channel is a broadcast channel of a wideband code division multiple access system (downlink and uplink between BS and MS in WCDMA, col.8, line 57-col.9, line 3).

Regarding claim 38, Popovic further discloses wherein said parameter (frame information of random access burst-fig.8b about available RACH access slots, col.13, lines 54-59) defines a subset of available access slots (information about available RACH access slots) of said mobile communications network, see step 220-fig.9.

Regarding claim 39, Popovic further discloses (MS) determining said subset (frame information about available RACH access slots) by another parameter (the available RACH access time slots, step 220-fig.9) transmitted from said base transceiver station (BS) to said mobile station (MS).

Regarding claim 40, Popovic further discloses wherein said other parameter is a timing parameter (available RACH access time slots) defining (being selected by MS) a transmission timing of an uplink access slot (selected access slot from the available RACH access slots, step 230-fig.9).

41. (Cancelled)

Regarding claim 48, Popovic further determining (selecting) an index (an access slot) of an allowed uplink access slot (from the available RACH access slots) on the basis of a value of said parameter (acquired information about the available RACH access slots, col.13, lines 54-59) irrespective of a frame number of a frame used to transmit an uplink access slot (to transmit only during the selected access slot, step 240-fig.9).

Regarding claim 37,

Popovic (6,567,482) discloses a method, comprising:

(MS) receiving a parameter (information, col.13, lines 54-59) defining allowed (available) access slots of a physically existing random access channel (RACH) from a base transceiver station (BS) of a mobile communications network by at least one mobile station of a plurality of mobile stations of the mobile communications network (MS acquired information of available access slots on RACH broadcasted from BS, step 220-fig.9);

(MS) determining (determining from acquiring RACH), at said at least one mobile station, said allowed (available) access slots of the physically existing random access channel (RACH) based on said parameter (acquired information), (see step 220-fig.9);

(MS) using (selecting), at said at least one mobile station, at least one (an access slot, step 230-fig.9) of said determined allowed access slots of the physically existing random access channel (RACH) to initiate (send) a random access operation (a request to random access to the selected access slot) with said base transceiver station (BS), (see steps 230-240, fig.9); and

(MS) receiving said parameter (information of available random access channel access slot, col.13, lines 54-59) via a broadcast Channel (via broadcast channel, col.13, lines 43-45 & 53-59); and

(MS) initiating (sending) said random access operation (the request to random access to the selected access slot) via a physical random access channel uplink channel (MS to BS via RACH) and an acquisition indication channel downlink channel (BS to MS via RACH) of the wideband code division multiple access system (downlink and uplink between BS and MS in WCDMA, col.8, line 57-col.9, line 3).

49-50. (Cancelled)

Regarding claim 53,

Popovic (6,567,482) discloses a system, comprising:

a base transceiver station (BS) configured to transmit a parameter (information, col.13, lines 54-59) defining allowed access slots of a physically existing random access channel (RACH), see also step 220-fig.9; and

a plurality of mobile stations (MS) configured to receive (to acquire) said parameter (the information, col.13, lines 54–59) to determine said allowed access slots of the physically existing random access channel based on said parameter (to acquire the available random access channel access slots, col.13, lines 54–59), and to use (to select) at least one (an access slot) of said determined allowed access slots (the available random access channel access slots) of the physically existing random access channel (RACH) to initiate (to send) a random access operation (a request to random access to the selected access slot) with said base transceiver station (BS), see also steps 230–240, fig.9, wherein said base transceiver station (BS) is a wideband code division multiple access base transceiver station (col.8, line 57–col.9, line 3) and said plurality of mobile stations are wideband code division multiple access mobile stations (col.8, line 57–col.9, line 3, MS and BS are communicated in WCDMA).

54. (Cancelled)

Regarding claim 55,

Popovic (6,567,482) discloses an apparatus (BS), comprising:

setting means for setting (broadcasting) a parameter (information, col.13, lines 54-59) defining allowed (available) access slots of a physically existing random access channel (RACH)(BS setting information about RACH comprising available RACH access slots, step 220-fig.9), wherein at least one mobile station (MS) initiates (sends) a random access operation (a request to random access to the selected access slot) to the apparatus (BS) based on the allowed (available) access slots of the physically existing random access channel (RACH, steps 230-240, fig.9); and

(BS) transmitting means for transmitting said parameter (information of available RACH access slots, col.13, lines 54-59) to said plurality of mobile stations (MS, see also fig.1), wherein said apparatus is a wideband code division multiple access base transceiver station (col.8, line 57-col.9, line 3, BS in WCDMA).

Regarding claim 56, Popovic further discloses wherein said transmitting means (transmitter-not shown at BS-fig.1) transmits said parameter (acquired

information about available RACH access slots, col.13, lines 54-59) via a broadcast channel (broadcast channel, col.13, lines 25-28 & 53-59).

Regarding claim 57, Popovic further discloses wherein said setting means (broadcasting) sets said parameter (information about available RACH access slots, col.13, lines 54-59) in dependence on a timing parameter value (the available time slot period) defining (selecting) a transmission timing of an uplink access slot (an access slot from the available RACH access slots) in said random access operation (in the request to random access to the selected access slot, see steps 230-240, fig.9).

58. (Cancelled)

63. (Cancelled)

Regarding claim 64,

Popovic (6,567,482) discloses an apparatus (MS), comprising:

a receiver (receiver 46–fig.2) configured to receive from a network element (BS, fig.1) a parameter (information about available RACH access slots, col.13, lines 54–59) defining allowed (available) access slots of a physically existing random access channel (RACH) for a random access operation (random access to BS via the available RACH access slot–emphasis added, see step 220–fig.9);

a processor (not shown) configured to determine (to determine from acquired information about available RACH access slots, col.13, lines 54–59) said allowed (available) access slots of the physically existing random access channel (RACH) based on said parameter (acquired information, col.13, lines 54–59) received from said network element (BS), see step 220–fig.9; and

a transmitter (spreader 32–fig.2) configured to initiate (to send) transmission of a random access message (a request to the available RACH access slot, step 240–fig.9) to said network element (BS) using at least one (selecting an access slot, step 230–fig.9) of said determined allowed access slots (the available RACH access slots, col.13, lines 54–59) of the physically existing random access channel (RACH), wherein the processor (not shown) is

further configured to randomly select an uplink access slot (MS selects an access slot from the available RACH access slots, step 230–fig.9) to be used for transmitting a preamble (fig.8B) of said random access message (the request to random access to the available RACH access slots–emphasis added) from the allowed access slots of the physically existing random access channel determined by said processor (steps 230–240, fig.9), and wherein consecutive preambles (not shown, i.e., different preamble from different MS) are transmitted a predetermined number of access slots apart (only during the available RACH access slots are available for selecting to access by MS–emphasis added, step 240–fig.9).

Regarding claim 65, Popovic further discloses wherein said predetermined number (of access slots apart–emphasis added) depends on a timing parameter (the available RACH access slots, step 220–fig.9) received by said receiver (receiver 46–fig.2)(in other word, only the available RACH access slots are available for selecting to access by MS –emphasis added, step 240–fig.9, therefore, the predetermined number of access slots apart would inherently

depend on the availability of the available RACH access slots received by MS from BS—emphasis added).

Regarding claim 66, Popovic further discloses wherein said processor (not shown) is further configured to perform said random selection any time a preamble needs to be transmitted (step 230–240, fig.9 wherein the MS randomly selected an access slot from the available RACH access slots for transmitting a random access burst—fig.8b, see also col.13, lines 59–65).

67–73. (Cancelled)

Regarding claim 59, Popovic further discloses wherein said receiver is configured to receive said parameter (broadcasted information of available random access channel access slot, col.13, lines 54–59) via a broadcast channel (broadcast channel, col.13, lines 43–45 & 53–59).

Regarding claim 60, Popovic further discloses wherein said processor (not

shown) is further configured to determine (to determine from acquired information about available RACH access slots, col.13, lines 54-59) said allowed (available) access slots of the physically existing random access channel (RACH) on the basis of said received parameter (acquired information, col.13, lines 54-59 & see step 220-fig.9) and a timing parameter (the available time slot period) received via said broadcast channel (broadcast channel, col.13, lines 43-45 & 53-59).

Regarding claim 61, Popovic further discloses wherein said processor (not shown) is further configured to calculate (to determine for selecting) an index (an access slot) of an allowed uplink access slot (from the available RACH access slots) on the basis of the value of said received parameter (acquired information about the available RACH access slots, col.13, lines 54-59) and a frame number of a frame used to transmit an uplink access slot (to transmit only during the selected access slot, step 240-fig.9).

Regarding claim 62, Popovic further discloses wherein said processor (not shown) is further configured to determine (to determine for selecting) an index (an access slot) of an allowed uplink access slot (from the available RACH access slots) on the basis of the value of said parameter (acquired information about the available RACH access slots, col.13, lines 54-59) irrespective of a frame number of a frame used to transmit an uplink access slot (to transmit only during the selected access slot, step 240-fig.9).

Regarding claim 74,

Popovic (6,567,482) discloses an apparatus (MS), comprising:
a processor (receiver 46-fig.2) configured to receive a parameter (information about available RACH access slots, col.13, lines 54-59) defining allowed (available) access slots of a physically existing random access channel (RACH) from a base transceiver station (BS) of a mobile communications network (fig.1), determine (to determine from acquired information about available RACH access slots, col.13, lines 54-59) said allowed (available) access slots of the physically existing random access channel (RACH) based on said

parameter (acquired information, col.13, lines 54-59), use (to select) at least one (an access slot, step 230-fig.9) of said determined allowed access slots of the physically existing random access channel (MS selects an access slot from the available RACH access slots, step 230-fig.9) to initiate (to send) a random access operation (a request to random access to the available RACH access slots-emphasis added, step 230-fig.9) with said base transceiver station (BS), and (MS) receive said parameter (acquired information, col.13, lines 54-59) via a broadcast channel (via broadcast channel, col.13, lines 43-45 & 53-59), wherein said broadcast channel is a broadcast channel of a wideband code division multiple access system (col.8, line 57-col.9, line 3, uplink random access channel and downlink broadcast channels between MS and BS are based upon WCDMA).

Regarding claim 75,

Popovic (6,567,482) discloses an apparatus, comprising:

a processor (receiver 46-fig.2) configured to receive a parameter (information about available RACH access slots, col.13, lines 54-59) defining

allowed (available) access slots of a physically existing random access channel (RACH) from a base transceiver station (BS) of a mobile communications network (fig.1), determine (to determine from acquired information about available RACH access slots, col.13, lines 54-59) said allowed (available) access slots of the physically existing random access channel (RACH) based on said parameter (acquired information, col.13, lines 54-59), use (to select) at least one (an access slot, step 230-fig.9) of said determined allowed access slots of the physically existing random access channel (MS selects an access slot from the available RACH access slots, step 230-fig.9) to initiate (to send) a random access operation (a request to random access to the available RACH access slots-emphasis added, step 230-fig.9) with said base transceiver station (BS), and (MS) receive said parameter (acquired information, col.13, lines 54-59) via a broadcast channel (via broadcast channel, col.13, lines 43-45 & 53-59), and (MS) initiate (sends) said random access operation (the request to random access to the selected access slot) via a physical random access channel uplink channel (MS to BS via RACH) and an acquisition indication channel downlink channel (BS to MS via RACH) of the wideband code division multiple access

system (downlink and uplink between BS and MS in WCDMA, col.8, line 57–col.9, line 3).

Claim Rejections – 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Popovic as applied to claim 36 above, and further in view of Gustafsson (6,643,275).

Regarding claim 42, Popovic does not explicitly disclose changing a bit number of said parameter in dependence on said other parameter.

However, in the same field of endeavor, Gustafsson (6,643,275) discloses different MSs sending simultaneous random access requests with unique signature pattern, col.6, lines 13-31. Therefore, it would have been obvious to an artisan at the time of the invention was made to apply Gustafsson's teaching of selecting an unique signature pattern to Popovic's system to reduce the risk of collision for requests from different MSs that choose the same access slot with the motivation being to separate different simultaneous random access requests using the unique signature pattern.

Allowable Subject Matter

5. Claims 35, 43-47, 51, 76-80 are allowed.
6. The following is an examiner's statement of reasons for allowance:

Regarding claims 43 and 35, the prior art fails to teach a method, comprising: receiving a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network by at least one mobile station of a plurality of mobile

stations of the mobile communications network; "said parameter defines a subset of available access slots of said mobile communications network; determining said subset by another parameter transmitted from said base transceiver station to said mobile station; changing a bit number of said parameter in dependence on said other parameter; and disabling a transmission of a preamble signature or an acquisition indication in dependence on a value of said parameter," which is considered in combination with other limitations, as specified as, in the independent claim 43.

Regarding claim 44, the prior art fails to teach a method, comprising: receiving a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network by at least one mobile station of a plurality of mobile stations of the mobile communications network; "determining said subset by another parameter transmitted from said base transceiver station to said mobile station; changing a bit number of said parameter in dependence on said other parameter; and calculating an index of an allowed uplink access slot on the basis of a value of said parameter and a frame number of a frame used for

transmitting an uplink access slot," which is considered in combination with other limitations, as specified as, in the independent claim 44.

Regarding claims 45 and 47, the prior art fails to teach a method, comprising: receiving a parameter defining-allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network by at least one mobile station of a plurality of mobile stations of the mobile communications network; "wherein a bit number of said parameter is changed in dependence on said other parameter, wherein an index of an allowed uplink access slot is calculated on the basis of the value of said parameter and a frame number of a frame used for transmitting an uplink access slot, wherein said index is calculated by using the equation $i = 3 \cdot N + (F \text{ modulo } 3)$ where $0 \leq N \leq 2$, wherein F and N are integers, and F denotes said frame number, and wherein only access slots having indices within the range 0 to 7 are valid," , " which is considered in combination with other limitations, as specified as, in the independent claim 45.

Regarding claim 46, the prior art fails to teach a method, comprising: receiving a parameter defining allowed access slots of a physically existing

random access channel from a base transceiver station of a mobile communications network by at least one mobile station of a plurality of mobile stations of the mobile communications network; “wherein a bit number of said parameter is changed in dependence on said other parameter, wherein an index of an allowed uplink access slot is calculated on the basis of the value of said parameter and a frame number of a frame used for transmitting an uplink access slot, wherein said index is calculated by using the equation $i = 4 \cdot N + (F \text{ modulo } 4)$ where $0 \leq N \leq 3$, wherein F and N are integers, and F denotes a frame number indicating two consecutive frame numbers of said frame used to transmit an uplink access slot, and wherein only access slots having indices within the range 0 to 14 are valid,” which is considered in combination with other limitations, as specified as, in the independent claim 46.

Regarding claim 51, the prior art fails to teach a method, comprising: receiving a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network by at least one mobile station of a plurality of mobile stations of the mobile communications network; “wherein bit values of a binary

expression of said parameter determine a combination of calculated indices obtained for other values of said parameter, said other values corresponding to binary weights of said binary expression," which is considered in combination with other limitations, as specified as, in the independent claim 51.

Regarding claim 76, the prior art fails to teach an apparatus, comprising: a processor configured to receive a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network; "change a bit number of said parameter in dependence on said other parameter, and disable a transmission of a preamble signature or an acquisition indication in dependence on a value of said parameter," which is considered in combination with other limitations, as specified as, in the independent claim 76.

Regarding claim 77, the prior art fails to teach an apparatus, comprising: a processor configured to receive a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network, "change a bit number of said parameter in dependence on said other parameter, and calculate an index of an allowed

uplink access slot on the basis of a value of said parameter and a frame number of a frame used for transmitting an uplink access slot," which is considered in combination with other limitations, as specified as, in the independent claim 77.

Regarding claim 78, the prior art fails to teach an apparatus, comprising: a processor configured to receive a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network; "wherein a bit number of said parameter is changed in dependence on said other parameter, wherein an index of an allowed uplink access slot is calculated on the basis of the value of said parameter and a frame number of a frame used for transmitting an uplink access slot, wherein said index is calculated by using the equation $i = 3 \cdot N + (F \text{ modulo } 3)$ where $0 \leq N \leq 2$, wherein F and N are integers, and F denotes said frame number, and wherein only access slots having indices within the range 0 to 7 are valid," which is considered in combination with other limitations, as specified as, in the independent claim 78.

Regarding claim 79, the prior art fails to teach an apparatus, comprising:

a processor configured to receive a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network, "wherein a bit number of said parameter is changed in dependence on said other parameter, wherein an index of an allowed uplink access slot is calculated on the basis of the value of said parameter and a frame number of a frame used for transmitting an uplink access slot, wherein said index is calculated by using the equation $i = 4 \cdot N + (F \text{ modulo } 4)$ where $0 \leq N \leq 3$, wherein F and N are integers, and F denotes a frame number indicating two consecutive frame numbers of said frame used to transmit an uplink access slot, and wherein only access slots having indices within the range 0 to 14 are valid," which is considered in combination with other limitations, as specified as, in the independent claim 79.

Regarding claim 80, the prior art fails to teach an apparatus, comprising: a processor configured to receive a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network, "wherein bit values of a binary expression of said parameter determine a combination of calculated indices obtained for

other values of said parameter, said other values corresponding to binary weights of said binary expression," which is considered in combination with other limitations, as specified as, in the independent claim 80.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

A/. Applicant argued that no action was taken in regard to the interview 2/6/9.

In reply, Palm system would not allow the Interview Summary to be sent out to applicant without a response to the previous office action, mailed 11/25/8. However, the interview summary is attached here.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUONGCHAU BA NGUYEN whose telephone number is (571)272-3148. The examiner can normally be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PHUONGCHAU BA NGUYEN/
Examiner, Art Unit 2416